University of Colorado at Boulder

Center for Astrophysics and Space Astronomy

Campus Box 389
Boulder, Colorado 80309-0389
(303) 492-4050
SPAN Address—CYGNUS::OFFICE
FAX: (303) 492-7178

Gloria Blanchard, Grants Officer
Code 286.1
NASA-Goddard Space Flight Center
Greenbelt, MD   21771

FINAL REPORT
NASA GRANT NAG5-1667
UNDERSTANDING AND INTERPRETING SPACE SCIENCE DATA

The purpose of this grant was to introduce astronomical concepts, astronomical observing techniques and modern astronomical analysis tools into the middle and high school of the Park-3 school district in Estes Park, Colorado. Due to the very late arrival of the grant money, it was necessary to make substantial changes from the original proposal, especially in the timing of the work.

In the last several years we have become quite involved with 8th grade Middle School classes and the High School Physics and Physical Science classes. We developed and implemented a number of demonstrations and discussion on the properties of stars (e.g stellar temperatures, parallax measurements). These involved teaching the high school physics class a unit on radiation laws and how these laws are used by astronomers in order to understand the universe. Special lectures were presented to four 8th grade middle school sections and we were present in their class room for about a month providing general backup and background information. Observing sessions were held, teaching the students the constellations, star colors, stellar magnitudes and then observing the sky with binoculars and telescopes. We arranged visits to and gave demonstrations at the CU planetarium and the Sommers-Bausch Observatory for these classes as well. Obtaining images with a small CCD camera and analyzing the images teaches the students the great deal of data that can be extracted and care with which any analysis has to be done.

The equipment purchased under the grant will continued to be used to teach and train future students.

Irene R. Little-Marenin

Stephen J. Little